**Homework 52 FORM A** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Congruent Triangles AAS, SSA, AAA** Period:\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Directions: Show all your work and **write in complete sentences when needed**.

For #1- 6, determine if the two triangles are congruent. If so, **write a congruency statement and identify what postulate** is needed to prove congruency.

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| 1)  Congruency  Statement: \_\_\_\_\_\_\_\_ ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ | 2)    Congruency  Statement: \_\_\_\_\_\_\_\_ ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ | | 3)    Congruency  **Statement: \_\_\_\_\_\_\_\_** ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ |
| 4)    Congruency  Statement: \_\_\_\_\_\_\_\_ ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ | | 6)    Congruency  Statement: \_\_\_\_\_\_\_\_ ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ | |

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| 6)    Congruency  Statement: \_\_\_\_\_\_\_\_ ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ | 7)    Congruency  Statement: \_\_\_\_\_\_\_\_ ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ | 8)  Congruency  Statement: \_\_\_\_\_\_\_\_ ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ |
| 9)    Congruency  Statement: \_\_\_\_\_\_\_\_ ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ | 10)    Congruency  Statement: \_\_\_\_\_\_\_\_ ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ | 11)    Congruency  Statement: \_\_\_\_\_\_\_\_ ≅ \_\_\_\_\_\_\_  Postulate: \_\_\_\_\_\_\_\_\_ |

**Mixed Review**

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| 1) What are the values that would make the following expression undefined?  X2 + 2x – 15 = 0 | 2) What is the distance between the following two points?  (-2, 2) (1, -2) |
| 5) An equation of a line in the (x, y) coordinate plane is given as:  -2x – 6 = 8y   1. What is the slope of this line? 2. At what point (x, y) will this line cross the x-axis? 3. At what point (x, y) will this line cross the y-axis? | 6) The points (4, 5) and (7, 10) are on line *a*. Find the equation for the line that is parallel to line *a* and passes through point (0, 5). |
| 7) Simplify: | 8) If , then x =? |